

REMARKS

Reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

Applicant has canceled claims 37 – 58 and 80 – 90 without prejudice or disclaimer.

Claim 59 has been amended by including the limitations of former claim 37 therein and by converting it to an independent claim.

Claim 63 has been amended to recite -- method -- in lieu of “composition” in line 1 thereof. This was to correct a typographical error.

Claim 92 has been amended to now include the limitations of former claim 43 and by converting it to an independent claim.

The claims presently pending before the Examiner are 59 – 79 and 91 – 101.

35 U.S.C. § 112

The § 112, second paragraph rejection for indefiniteness with respect to claims 63 – 67 has been overcome by the amendment made to claim 63. Withdrawal of the rejection is solicited.

35 U.S.C. 102(b) and 103(a)

Claims 37 – 101 stand rejected under 35 USC § 102(b) as anticipated by or, in the alternative, under 35 USC § 103(a) as obvious over Wolf et al. (US 5,114,492). This rejection is respectfully traversed.

The Examiner has sought to substantiate these rejections as follows:

Wolf et al teach a composition and process for preparing comprising a caramelized carbohydrate and removing color, wherein the composition is used in foods and beverages such as beer (see entire patent, especially Figure 1).

The claims appear to differ as to the recitation of absorption values, the presence of pyrazine derivatives, and the resistance to light induced flavor changes.

The claimed absorption values, pyrazine amounts, and light resistance would be no more than inherent and/or obvious to that of Wolf et al as the same components and process steps are used.

Claims 59-79

Independent claim 59 defines a method of manufacturing a beverage or a foodstuff that is resistant to light induced flavour changes, said method comprising introducing into said beverage or foodstuff a composition comprising caramelized carbohydrates. The latter composition is characterized in that when dissolved in water at a dry solids content of 0.1 wt.% it exhibits:

- i. an absorption at 280 nm (A_{280}) that exceeds 0.01; and
- ii. an absorption ratio $A_{280/560}$ of at least 200.

As explained in the Summary of the Invention, the composition used in the aforementioned method contains caramelized carbohydrates of low colour intensity that are capable of absorbing UV light. Such a composition can suitably be produced by decolorising caramelised carbohydrate, e.g. by ultrafiltration.

Wolf et al. describes a continuous process for producing ammonium sulphite caramel color. This process comprises a step in which a caramelized solution is subjected to ultrafiltration to give a retained fraction comprising high molecular weight color bodies and a permeated fraction that has less coloring capacity than the retained fraction.

Applicants note, however, that Wolf et al. teach the recirculation of the permeated fraction after evaporative concentration to the initial caramelization step where it is combined with make-up reaction mixture (see Figure 1). Thus, the ultrafiltration permeate that is produced in the process of Wolf et al. is an intermediate product that is reused in the process in which it is generated.

It is evident from column 2, lines 15-32 of Wolf et al., that the purpose of ultrafiltering the caramelized solution is to utilize "essentially all of the carbohydrate for the production of color", including "residual carbohydrate (noncolor bodies)" recovered in the ultrafiltration permeate. Wolf et al. do not consider any possible applications of the ultrafiltration retentate other than in the caramel production process described therein.

In contrast, the claimed invention resides in the recognition by the Applicants that decolorized (e.g. ultrafiltered) caramel may advantageously be added to a beverage or a foodstuff to improve its resistance to light induced flavor changers. Wolf et al. not only fail to disclose such an application of decolorized caramel, but Wolf et al. also contain no hint or suggestion that could be said to have motivated a person of ordinary skill in the art to utilize the ultrafiltration permeate described therein for this particular purpose.

Hence, Applicants submit that the subject matter of claims 57-79 are clearly distinguishable over the teachings of Wolf et al. Since the rejections under § 102 (b) and § 103 (a) have both been overcome by a preponderance of the evidence, withdrawal of these rejections is respectfully solicited.

Claim 91

Claim 91 defines a beverage or foodstuff that is obtained by a method according to claim 59. Hence, the subject matter of claim 91 has inventive merit vis-a-vis the disclosure of Wolf et al. for the reasons already presented above in relation to claim 59.

Claims 92-101

Claim 92 defines a hop containing beverage having an EBC colour value of less than 25 and a content of specified pyrazine derivatives, expressed in mg/kg, that exceeds $0.1 \times \text{EBC colour value}$.

Even if, for the sake of argument, it is assumed that the ultrafiltration permeate of Wolf et al. contains significant levels of the latter pyrazine derivatives, the Wolf et al. disclosure would not have led a person of ordinary skill in the art to the hop containing beverages of claim 92 since, as explained herein previously, such person would not have been motivated by Wolf et al. to introduce such ultrafiltration permeate into a hop containing beverage.

For completeness sake, it is noted that the application in a beverage of a caramel product obtained by the process described by Wolf et al. would result inevitably in a

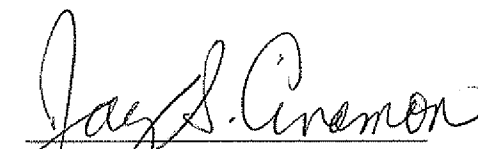
beverage having a color value of more than 25 or a beverage in which the content of pyrazine derivatives (in mg/kg) is less than 0.1 xEBC color value.

Since the rejections of record have been overcome, the issuance of a Notice of Allowance is respectfully solicited.

Please charge any fees which may be due to our Deposit Account No. 01-0035.

Respectfully submitted,

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